DOCUMENT RESUME

ED 392 039 CS 215 171

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TITLE The Effects of Accelerated Learning on Tertiary Students Learning To Write.
PUB DATE 95
NOTE 22p.; Paper presented at the Educational Research Association Conference (9th, 1995).
PUB TYPE Viewpoints (Opinion/Position Papers, Essays, etc.) (120) -- Speeches/Conference Papers (150) -- Reports - Research/Technical (143)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS Foreign Countries; Higher Education; Music; Neurological Organization; *Psychoeducational Methods; Reading; Relaxation Training; *Suggestopedia; *Writing Ability; *Writing Instruction; Writing Research
IDENTIFIERS Research Suggestions; Teaching Research; Whole Brain Learning

ABSTRACT

A study investigated how Accelerated Learning (AL), a teaching methodology that purports to increase the quantity and improve the quality of learning, affected tertiary students' knowledge of and skills in writing and their feelings towards writing. AL has its origins in G. Lozanov's "suggestopedia." Believing that formal teaching methods were a cause of mental illness or brain sickness, Lozanov began research on how to heal the mind and expand the memory. His research indicated that by stimulating both the left and right hemispheres of the brain, learning could be accelerated. His teaching methodology, called Suggestopedia, uses the power of suggestion, music, relaxation, deep breathing, metaphors, guided imagery, roleplay, and "concert sessions" (reading to instrumental music) to facilitate whole brain learning. The target group for the study consisted of 80 first-year students in business communication in a Singaporean polytechnic. Findings suggest an incongruence between the actual outcomes and perceived outcomes: there were no obvious improvements in writing ability amongst the experimental groups; however, students felt that AL affected their learning to write. Students indicated that the methodology had a positive effect on both their ability to write better and their enjoyment of writing. Educators should consider using AL in the classroom and longitudinal studies should be undertaken on the effects of AL on writing. (Contains 3 tables and a figure, 6 references and a 10-item bibliography. Appendixes contain three short questionnaires on writing skills, on personal feelings, and on accelerated learning.) (Author/TB)

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ED 392 039

Educational Research Assocation
9th Annual Conference, 1995

The Effects of Accelerated Learning on Tertiary Students Learning to Write

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Abstract

The purpose of this study is to investigate how Accelerated Learning (AL), a teaching methodology which purports to increase the quantity and improve the quality of learning, affects tertiary students' knowledge of and skills in writing and their feelings towards writing. The findings indicate an incongruency between the actual outcomes and perceived outcomes: there were no obvious improvements in writing ability amongst the experimental groups; however, students' felt that AL affected their learning to write. The students' indicated that the methodology had a positive effect on both their ability to write better and their enjoyment of writing. It concludes that educators should consider using AL in the classroom as students'feel it helps them learn. It also recommends that longitudinal studies on the effects of AL on writing are needed as this study is limited by its short duration.

I Introduction

In modern education, school-style learning has been facilitated by certain "acceptable" teaching approaches and methods. These approaches and methods tend to focus exclusively on logical, systematic thinking. While pre-school and kindergarten children are offered a variety of learning opportunities stimulating all of their intelligences, many argue that "real" learning starts only with ABC, 123. The school system's obsession with teaching the 3R's is an obvious outcome of this philosophy.

Our educational system has, therefore, provided a venue for some students to succeed while leaving others either struggling to keep up or completely falling through the cracks. "Left brain learners", those who prefer to learn using a logico-rational approach, learn quickly under a system of core subjects requiring analytical thinking and strong linguistic abilities such as reading, writing, and speaking. Meanwhile "right brain learners", those who learn best through a more holistic, intuitive approach, are rarely given an opportunity to use their inherent abilities, except in elective courses such as drama, music, art or physical education.

With the discovery of the different processing functions of each brain hemisphere, we have come to realize that for optimum learning to occur both hemispheres must work in tandem. Researchers have found that the "better connected the two halves of the brain, the greater the potential of the brain for learning and creativity" (Rose, 1985, 15). Moreover, highly creative learners know the difference between the processing functions of each hemisphere and are able to activate these different processes (Edwards, 1989). Our job as educators should be to help students strengthen the brain by utilizing its entire capacity.

In his studies on college level writers, Winderowd (1986) noted that students have a propensity for producing either "propositional" writing (organized, formal, filled with abstract ideas, poor examples) or "appropositional" writing (filled with vivid illustrations, but no sense of organization or formality). Therefore, he argued that teaching students to "brain hop", to use both sides of the brain, will improve their writing. Instead of focusing on one side of the brain, he suggests using "bi-hemisphere activities". For example, when teaching the structure of a thesis statement, use a logical, verbal description and then use a visual format (e.g. a mindmap) (40-47). Jewell (1992) also argued that to improve writing, students need to write in the way they are unaccustomed.

If we take up the challenge to expand the totality of our learners' minds in order to improve their writing, we are left in a quagmire. How do we do it? What methodology should we employ? Accelerated Learning (AL), a teaching methodology which purports to increase and speed up learning by stimulating the whole brain, was chosen for this study.

Although there is little research on the influence of AL on academic achievement, there is some evidence to indicate that the affective domain influences learning (Portes & Foster, 1986). The purpose of this study is to investigate how AL affects the students' knowledge of and skills in writing (cognitive) and their feelings towards writing (affective).

Background to Accelerated Learning

Believing that formal teaching methods were a cause of mental illness or brain sickness, Dr. Georgi Lozanov, a Bulgarian doctor, began research on how to heal the mind, expand the memory and learn faster.

His research indicated that by stimulating both sides of the brain--the left and right hemispheres--learning could be accelerated. The old adage 'two brains are better than one' might have been coined before Lozanov's time--the ancient Egyptians knew of the differing functions of the brain hemispheres. However, Lozanov applied this knowledge and developed "Suggestology"[1].

Suggestology, the science of healing through the power of suggestion, made Lozanov an overnight sensation in Eastern Europe as many of his patients were cured with his eclectic techniques. Later, he applied his research to a teaching methodology called Suggestopedia, the mother of Accelerated Learning (Ostrander & Schroeder, 1994; Rose, 1985).

As Suggestopedia's influence began to spread globally, educators began to ask practical questions about the application of Lozanov's theory and practices to their classroom contexts. In response to this call, Accelerated Learning emerged, precipitated by the the formation of The Society for Accelerative Learning and Teaching[2] (SALT).

AL's origins in Suggestopedia have defined the parameters of this teaching methodology. Relaxation, the use of suggestion, and music are its cornerstones. These cornerstones translate into a variety of classroom techniques which

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[1] See Ostrander & Schroeder (1994) for a more indepth discussion on Lozanov & Suggestology.

[2] The Society now has chapters in a number of countries and an annual international conference. Refer to Ostrander & Schroeder (1994) for a list of SALT chapters and addresses.

facilitate whole brain learning: deep breathing exercises, metaphors, guided imagery, roleplay, and "concert sessions" (readings read to instrumental music). The following is an overview of how the theory of AL has translated into teaching techniques.

Relaxation- The mind in a relaxed, unconscious state can take in more information at a faster rate and retain that information longer than the mind in a rational, conscious state. This discovery was made by studying human brain wave patterns. In an 'alpha' state (relaxed, meditative state) the brain produces a higher frequency of wave activity than in a 'beta' state (awake, conscious state)[3] (Rose, 1984).

The corollary is that the brain is most receptive to learning when relaxed. Therefore, if we wish learning to accelerate, we need to help our students find their alpha state. In AL relaxation is often induced via deep breathing, music and/or guided imagery. Ideally, the relaxation should take place at the outset of the learning session to prepare the mind for learning. Although periodic breaks for relaxation during a session are very beneficial, especially during long sessions.

Music-Classical musicians in India, Japan, and Europe had something in common. They all composed music which has a powerful effect on the mind. Using a precisely mathemathical tempo of 60 beats per minute, composers of Sitar, Koto, and Baroque music stimulated the listeners' minds while helping them relax. The power of this type of music has spread into our society as a number of contemporary musicians are composing 60 beat per minute music.[4]

Baroque music[5] appears to have a strong mind/body relationship. It physically effects the body by slowing down the heart rate and decreasing blood pressure and, in turn, bolsters brain activity. In AL the methodical 60 beat per minute tempo of the slow Baroque concerts are used to induce relaxation, speed up learning, and expand memory, improve concentration and visualization. In classroom studies using Baroque music, it has been found that students are positively affected in three areas: the physical, the affective, and the academic.

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[3] Brain wave activity is even higher during the 'theta' and 'delta' states: theta waves are produced during deep meditation and between awakefulness and falling asleep while delta waves occur during deep non-REM sleep (Rose, 1985, 23-24).

[4] Some contemporary composers are Steve Halpern and Janalea Hoffman. Refer to Ostrander & Schroeder (1994, 283-284).

[5] Baroque music was composed during the 17th and 18th centuries by famous composers such as Bach, Vivaldi, Telemann, and Corelli.

Physically, students say they feel more relaxed; emotionally, they enjoy learning with the music; and academically, test scores have improved (Ostrander & Schroeder, 1994, 67; Portes, et al, 1992; Portes & Foster, 1986).

In the classroom music can be used directly or indirectly, as an integral part of an activity or as background music. The selection of music may also depend on the environment. For example, in the mid afternoon when learners are sleepy, a slow Baroque concert session might result in very loud snoring sounds emanating from your classroom.

Applying the natural learning properties of music, Lozanov developed the Concert Session[5]: words read to music. The purpose of the concerts is "to speed learning two to ten times faster...enhance health and expand creativity and potentials" (Ostrander & Schroeder, 1994, 105). There are two types of concerts: Passive and Active. The Active concert uses fast, upbeat music to recharge the body and mind. Mozart's concertos are especially good for an Active concert. The Passive concert uses slow, 60-beat per minute music to put the body and mind in a relaxed and receptive state.

Suggestion- The power of suggestion has proven to have a great effect on the mind. In AL classes, suggestions are made via metaphor and guided imagery (sometimes called guided visualization). Metaphors can be standalone during an activity or written up in the context of a concert session or guided visualization.

Guided imagery is one of the most powerful suggestive techniques. It is during guided imagery that "creative visualization" can occur as all senses are tapped. Einstein, for example, visualized The Theory of Relativity while daydreaming on a hilltop (Rose, 1985, 15).

Firstly, the listeners are put into a relaxed state by closing their eyes and breathing deeply to relieve any physical tension. Ideally, the lighting in the room should be dimmed and background music should be playing quietly.

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[5] During the Active concert, the learners are given a script with the dialogue written down the left side of the page and new terms, ideas, words defined on the right side of the page[6]. The reading of the script is an important component of the concert. The instructor reads the script outloud following the cadences, volume, and speed of the music with his/her voice. In other words, the reader's voice becomes one with the music. While the instructor is reading the script, the learners read along silently. It should be noted that the Active concert is a "whole brain" activity as it combines music (a right brain function) with reading (a left brain function). In comparison to the Active concert, the Passive concert is a right brain activity. During this concert the listeners do not read the script, but close their eyes and just let the words wash over them while the music induces a relaxed state. The Passive concert is also used as a "reinforcement" activity as the learners have already been introduced to the new information (terms, concepts, formulas, etc.) during the Active concert.

Next, the listeners are told to imagine they are someone else. Taking on a new persona allows the learner to go beyond any self-imposed limits or rise above the "I can't do that" mentality. In their new skin, the listener can do anything they desire and, therefore, guided imagery is a "shortcut to expertise" (Ostrander & Schroeder, 1994, 150). Finally, the listeners are guided through a carefully prepared reading. The text uses words such as feel, see, think, hear, smell, taste, etc. to evoke different senses.

Used in a relaxed state, guided imagery can also help some people go back into their subconscious and remember past events and information. Therefore, guided imagery is also a key way to improve memory and expand concentration.

II Methodology

Target Group

The target group consisted of 80 first year students studying business communication skills in a Singaporean polytechnic. The 8 week duration of this study coinceded with the length of one module. The module was entitled "Writing Skills" and its purpose was to teach students both the fundamentals of writing and the writing process.

Four classes from two diploma courses were chosen for this study: 2 Legal Studies (LS) and 2 Tourism & Hospitality Management (TM). Since students from different diploma courses display differing language abilities (for example, LS students have higher "O" level English grades), data were compared between classes from the same course. Therefore, one experimental group was chosen from each course. In other words, the data from the LS experimental class was compared to the LS control class.

Techniques Used

The students experienced a variety of AL techniques: guided imagery, background relaxation music, both Active and Passive concert sessions, and script reading. At minimum, two techniques were used in each tutorial session.

Concert Sessions

Technically, the two concerts should be conducted back-to-back with the Active concert going first. However, due to time constraints the concert sessions were sometimes spaced out over two tutorials. Concert sessions were conducted once a week either in the middle or at the end of a double period tutorial.

Guided Imagery

Guided imagery was used regularly; however, less frequently than concert sessions. They ranged in length from 5-10 minutes. Most often the purpose was

to review and reinforce information that had been previously covered. However, on occasion guided imagery was used as a mental break for the classroom activities.

Background Music
Background music accompanied small group and pair work. The selection of music depended on the activity and the time of day. For example, afternoons were an ideal time to play up-beat, dramatic music when signs of exhaustion from a long day were showing.

Data Collection Instruments

Measures of Knowledge/Skills
A pre and post test compared the students' knowledge of writing (Appendix 1) and the students' graded writing portfolios determined their level of ability.

Measures of Attitudes/Feelings
Capturing AL's effect on the students' feelings and attitudes toward writing was done in two ways: a pre and post module question (see Appendix 1: bottom of pre-test) and an "affective" checklist administered biweekly, pre and post tutorial (Appendix 2).

At the beginning of the writing module, the students were asked to rate on a 5 point scale their feelings towards their own learning and then again at the end of the module. The question read: I feel my writing skills are Excellent, Very Good, Good, So So, Lousy. Students' responses were compared to determine any attitudinal shifts. For example, if at the beginning of the module a student said his or her writing skills were 'Average' and at the end of the module he or she felt their skills were 'Good', this would represent a positive change in attitude.

The second measurement of the students' feelings towards learning to write was the affective checklist called "How are you feeling today?". Its purpose was to determine how the students were feeling before and after the Accelerated Learning tutorial. Students were asked to share how they felt vis-a-vis ten "feelings" adjectives on a scale of 1-5, 1 being not at all and 5 being extremely. Since we were trying to discover whether AL techniques helped our students feel better, the pre and post scales were compared. Four comparative words were used to categorize the changes: better, better/worse, worse, and same. If the majority of the adjectives had higher scores, then the overall effect was "better" and vice versa for "worse". "Better/worse" refers to cases where half the adjectives were given lower scores and half higher scores. In other words, the student had mixed reactions to the tutorial. "Same" means that there was no change before or after the tutorial.

Perception

In a post module questionnaire (see Appendix 3) students were asked *which* AL techniques affected them and *how* each technique affected them. For the purpose of this research only question 2 is addressed in the findings.

Limitations

The effectiveness of the AL techniques might have been negatively impacted by two external factors: noise and exhaustion. Banging of doors, construction in progress, and students talking in the hallways made it difficult for the students to hear the words spoken during concert sessions and guided imageries. Exhaustion also affected the execution of the AL techniques. As mentioned above, slow, relaxation music played during Passive concert sessions and guided imagery put a number of students to sleep, especially after lunch or at the end of the day. It is arguable, however, that sleeping students are actually more receptive to information as they are functioning in a deeper subconscious state.

Also, the short duration of this study might not allow for very accurate results. In the case of writing skills, which take many years to acquire, one might not see visible changes in a two month period.

III Findings

Findings are divided into two parts: actual cognitive and affective outcomes, and perceived cognitive and affective outcomes.

1. Actual Outcome

Cognitive: Students' Knowledge of & Skills in Writing

At the end of the writing module, the pretest was returned to the students who then made corrections to their original answers. Table 1 lists the number of corrections made to the pretest. The results show that the number of corrections made by TM experimental students was slightly lower than the control group--88.1% as compared to 99.9%. Only 1 student made no corrections. Similarly, the LS students who were exposed to the AL techniques scored somewhat worse than their LS counterpart--78.9% as compared to 99.9%. 4 students (21%) did not make any correct changes.

Table 1: Pre & Post Knowledge Test

n=number of students

Numbers of Corrections	TM* n=17	TM n=18	LS* n=19	LS n=17
+ 4	2 (11.8%)	3 (16.7%)	2 (10.5)%	2 (11.8%)
1-3	13 (76.4%)	15 (83.3%)	13 (68.4%)	15 (88.2%)
O	2 (11.8%)	0	4 (21.1%)	0

**=experimental group*

Therefore, AL had very little effect on improving the knowedge of the TM group while it appeared to have less effect on the LS students. It is possible, however, that other factors could have swayed the outcome. For example, the LS experimental group met very late in the day and tiredness might have been a learning deterrent.

In terms of writing skills, the level of improvement was measured by a writing portfolio: a series of graded writing assignments. Table 2 shows the breakdown of grades for the 4 classes. By comparing the grades, it is obvious that the students'writing skills were not significantly enhanced by Accelerated Learning techniques.

Table 2: Writing Portfolio Grades

Final Grades from Writing Portfolios	TM* n=19	TM n=19	LS* n=21	LS n=21
A	2	2	3	5
B	14	11	12	13
C	3	6	6	3

Affective: Students' Feelings towards Writing and Learning to Write

Firstly, we were interested to discover whether AL facilitated an improved attitude towards one's own writing ability. Table 3 outlines how the students' attitude toward their writing skills changed by the end of the writing module.

Table 3: Students' Changes in Attitude towards their own Writing

How students felt about their writing skills after completing module	TM* n=19	TM n=18	LS* n=19	LS n=17
better	8 (42.1%)	9 (50%)	7 (36.9%)	5 (29.4%)
worse	0	0	2 (10.5%)	1 (5.9%)
same	11 (57.9%)	9 (50%)	10 (52.6%)	11 (64.7%)

In the TM diploma, the majority of the experimental group felt the same about their writing skills at the end of the module. Moreover, students in the control group portrayed a slightly better attitude (7.9%) than their counterparts. In other words, AL did not have a great impact on improving students' attitudes towards their own writing. By contrast, the LS experimental group was more positive (7.4%) about their skills at the end of the module than the LS control group.

Ironically, however, more LS students who were subjected to AL techniques felt worse (4.7%) about their writing skills. To recap, Accelerated Learning did not facilitate a positive attitudinal shift.

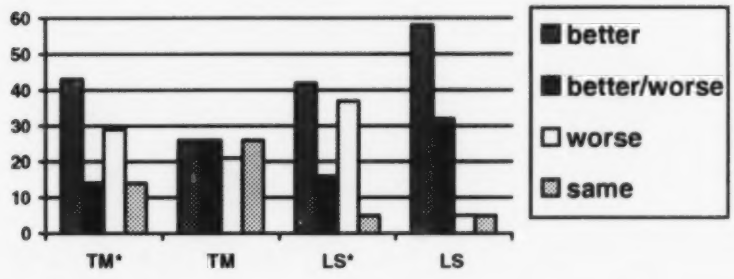
The next question under investigation was: how does AL affect one's feelings towards learning to write. Figure 1 outlines the biweekly findings from each of the four classes[7]. The fluctuations in data from week to week indicate that the AL techniques really had no effect on the students' emotional state. Some weeks the control groups felt better after the tutorial and other weeks the experimental groups felt better. More striking, though, is the number of students who felt worse after the AL tutorial (as did some students after the non-AL tutorial).

Therefore, one can assume that other factors were at play. We can, however, exclude time of tutorial as a privotal factor in swaying the students' mood. Specifically, both TM and LS control groups had a tutorial at the end of the day--when exhaustion is at its greatest. However, in Week 2 the LS control felt much better than the LS experimental group and in Week 4 the TM control group felt better. One can only postulate as to the factor(s) which did effect the students' emotions and feelings. Possible explanations are: the amount of work/level of stress; content of the lesson; or other personal/social concerns.

[7] Findings for the LS group are unavailable in Week 4.

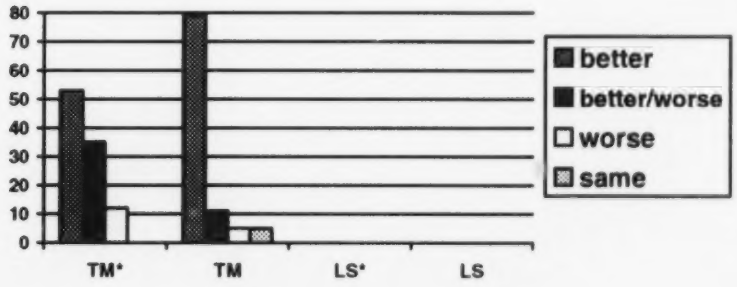
Figure 1: Students' Feelings After the Tutorial

Week 2

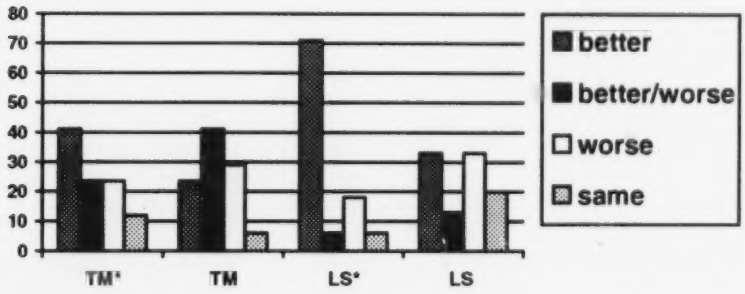


*=*experimental group*

Week 4 (LS data not available)



Week 6



2. Perceived Outcomes

The most interesting finding in this research was the students' perceptions of how AL had affected them. Although our data concludes that students' knowledge of and skills in writing, and students' feelings towards their writing skills were not affected by AL, overridingly students perceived that AL had an enormous impact on both their thinking processes and emotional state.

95% (36/38) of students exposed to Accelerated Learning felt that the methodology had a positive effect on their writing. Only 1 student had a negative response to AL describing some techniques as "irritating" and the background music as hampering concentration. (One student did not respond.)

Students' perceptions of how AL affected their writing skills are divided into the two domains: affective and cognitive.

Firstly, let us turn to cognition, how AL affected the students' knowledge of and skills in writing. Below is a list of the effects cited by the students. The number in parentheses relates to the number of student responses to each item, that is, 92 responses dealt with students' cognitive outcomes.

Cognitive: Effects on Knowledge of & Skills in Writing

1. Improves output: quality of writing(46)
- have better/more ideas (17)
- be more creative/stimulates ideas (13)
- develop/explore imagination (12)
- write more descriptively (1)

2. Increases input: knowledge of writing (44)
- concentrate & focus more (14)
- absorb & learn more (13)
- understand/think better (10)
- learn faster (7)
- retain (1)
- learn more easily (1)
- have more time to ponder/reflect on what to write (1)

3. Builds skills (2)
- listen better (1)
- train to study (1)

According to the students, AL helped them learn more about writing (the input of information). They were able to think and learn--concentrate, absorb, retain--better, more, and faster. In addition, the quality of their writing (the output of

information) improved in terms of generating ideas and producing more imaginative and descriptive pieces.

Secondly, apart from their heads, were students' hearts affected by AL? The 67 responses show that the students believed that AL helped them feel better about learning to write. The method created a positive learning environment by lowering stress, inducing relaxation, and bringing fun and stimulation to the classroom.

Affective: Effects on Feelings about Writing

1. Relaxes the body & mind (34)
- calms, soothes, destresses, gives peace[8] (34)

2. Creates ambience (12)
- helps one to express thoughts & feelings/emotions come alive (3)
- inspires/motivates (2)
- puts one in the mood/gets one "psyched up" (2)
- gives space to fantasize (2)
- boosts enthusiasm (1)
- makes one feel positive (1)
- feels normal (background music is used while studying at home) (1)

3. Brings enjoyment (11)
- is interesting (7)
- is enjoyable (4)

4. Lowers anxiety (7)
- breaks tension: writing is less intimidating/less worried about writing (6)
- clarifies doubts (1)

5. Facilitates readiness to learn (3)
- makes one more alert/attentive (2)
- refreshes (1)

In summary, these data show that the students felt that AL had a very strong impact on both their cognitive and affective domains. More responses were given for AL's effect on thinking and learning (92 responses) than on feelings and emotions (67 responses). However, if we look at each effect individually, relaxation stands out as the most profound benefit. 34/38 (89.5%) students cited relaxation as having a positive effect on their writing.

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[8] According to the questionnaire data, Passive concerts, guided imagery, and background music when accompanied by slow music helped the students relax.

IV Discussion

The findings indicate a cleavage between the actual and perceived outcomes. The students felt that AL had a positive effect on their writing and their feelings towards writing while our data show it had little to no effect. Several reasons for this dispute will be posited at this point.

First, an immediate improvement in knowledge or skills might not be possible. There is no quickfix or wonder drug to instantaneously became a good writer. Regardless of teaching methodology, level of knowledge, or feelings toward writing, practise is the only way "to make perfect".

Second, the destressing nature of the AL classroom might have longer term and farther reaching benefits than are observable within the parameters of this writing module. For example, the moments of peace and tranquility found during the AL tutorials might have spilled over into other subject tutorials or carried into the exam halls and study halls.

Third, indisputably, the mind is a powerful and persuasive tool: what one thinks or believes affects one's actions. Therefore, if our students believe that AL is beneficial to their learning, it will be so--eventually.

Finally, educational researchers and classroom practitioners will tell us that motivation has a strong influence on learning outcomes. If a student enjoys learning because the teaching method, the teacher's personality, the surrounding, et cetera are pleasing, then she or he will learn, *in spite of* the content. The students participating in this study enjoyed the methodology; some even requested more. Therefore, AL can be considered as a catalyst for motivating students to learn.

V Conclusion

Accelerated Learning does have an effect on tertiary students' learning: the students in this study liked learning with Accelerated Learning techniques and felt that it had many positive benefits. Since students enjoyed and even asked for certain techniques to be used (in particular guided imagery with relaxation music), tertiary level educators should consider employing AL in their classrooms. However, on the level of concrete academic gains, the jury is still out. This study shows no evidence that AL had an effect on students' knowledge of or skills in writing. Longitudinal studies are needed to investigate the long term and "ride-off" effects of AL on tertiary students, especially in skills areas requiring a lot of time and practice. Improvements in writing skills, for example, might not occur within a school term or an academic year. In the interim, the use of AL in the classroom can be safely viewed as an instrument of enjoyment and relaxation.

References

Edwards, B. (1989). **Drawing on the right side of the brain: A course in enhancing creativity and artistic confidence**. NY: J.P. Tarcher.

Jewell, R. (1992). Using the right brain to teach writing. **The Journal of The Society for Accelerative Learning and Teaching, 17**(3&4), 259-282.

Ostrander, S. & Schroeder, L. (1994). **Super-Learning 2000**. NY: Delacorte Press.

Portes, R. P. & Foster, C. (1986). Accelerated learning and self-concept in elementary and secondary school. **The Journal of The Society for Accelerative Learning and Teaching, 11**(1), 33-40.

Rose, C. (1985). **Accelerated Learning**. Aylesbury, Bucks: A.L. Systems.

Winderowd, W. R. (1986). Brain, rhetoric and style. In D. McQuade (Ed.), **The territory of language: Linguistics, stylistics, and the teaching of composition** (pp. 34-64). Cardondale, IL: Southern Illinois University Press.

Bibliography

Bonny, H. L. & Savary, L.M. (1989). **Music and your mind: Listening with a new consciousness**. Savary Barrytown, NY: Station Hill Press.

Bragley, T. & Hess, K. (1987). **200 Ways of using imagery in the classroom**. NY: Trillium Press.

Buzan, T. (1989). **Use both sides of your brain**. 3rd edition . NY: Plume-Penguin.

Cambell, D. (1992). **100 Ways to improve teaching using your voice and music**. Tucson, AZ: Zephyr Press.

Dhority, L. (1992). **The ACT approach**. USA: Gordon & Breach Science Publishers.

Portes, R. P. et al. (1992). Relaxation training effects on anxiety and academic performance. **The Journal of The Society for Accelerative Learning and Teaching, 17**(1&2), 117-148.

Prichard, A. & Novato, J. (1980). **Accelerated learning: The use of suggestion in the classroom**. CA: Academic Therapy Publications.

Schuster, D. & Gritton, C. (1986). **Suggestive accelerative learning techniques**. NY: Gordon & Breach.

Stockwell, T. (1992). **Accelerated learning in theory and practice**. Liechtenstein: Stockwell.

The Journal of Suggestive-Accelerative Learning and Teaching. (1976-present). The Society for Accelerative Learning and Teaching.

Appendices

Appendix 1 How Much do You Know about Writing Skills?

In the margin mark each sentence T(true) or F (false).

1. Your "audience" refers to the large amount of people who will read your writing.

2. One way to gather information before you start writing is to read other sources, e.g. books, articles, newspapers, etc.

3. When you borrow an idea or words from an author, you must always give them credit. This is done by citing their name and the date of their publication.

4. Writing is a process as well as a product.

5. The purpose of a conclusion is to bring up any new points which you have forgotten to talk about in the body of your writing.

6. Coherence refers to the flow of your writing.

7. Organising your ideas is the first step in the writing process.

8. You should always write the introduction of an essay first, before the body and the conclusion.

9. If you are not born with a talent for writing, you will never be a good writer.

10. The last step in writing is to proofread your work; make sure there are no grammar, spelling, or punctuation errors.

11. The ideas in your writing do not necessarily have to be connected to each other.

12. A paragraph and an essay follow a similar style of organisation.

13. Good writers are able to write an entire essay without making changes afterwards.

14. Reading aloud or asking someone else to read over your writing are two ways to catch grammar, spelling, or punctuation errors.

Circle the word which describes your feelings.

15. I feel my writing skills are:

Excellent Very Good Good Average Lousy

Appendix 2

How are you feeling today?

Please indicate how you feel at this moment. Write the number which corresponds to your feelings in the blank space provided.

5=Extremely
4=A lot
3=Somewhat
2=A tiny bit
1=Not at all

1. Tense= _____
2. Stimulated=_____
3. Uneasy=_____
4. Pleasant=_____
5. Distressed=_____
6. Peaceful=_____
7. Worried=_____
8. Alert=_____
9. Disinterested=_____
10. Contented=_____

Appendix 3

Accelerated Learning

1. Have the accelerated learning techniques positively affected your writing skills? *Circle one.*

✔(yes) ✘(no)

2. If yes, which of the following techniques affected your writing skills? *Check as many as you want.*

❑ deep breathing (more oxygen to the brain)
❑ guided imagery (creating a visual image in your mind)
❑ Active Concert (reading silently while the instructor reads to music)
❑ Passive Concert (listening while the instructor reads to music)
❑ background music (during other activities)
❑ reading a script with characters

2b) For each technique you checked, explain HOW the technique(s) affected you.

_____

_____

_____

_____

_____

(use the back of the page if you need more space to write)

3. If no, why did the accelerated learning techniques *not* affect you?

_____

_____

_____

_____

4. Did you enjoy learning with the accelerated learning techniques?

✔(yes) ✘(no)

4b) Which are your favourite ones?

_____

_____

_____

_____